

Message

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**From:** Scheehle, Elizabeth@ARB [Elizabeth.Scheehle@arb.ca.gov]  
**Sent:** 1/18/2018 9:23:20 PM  
**To:** timakirataylor@live.com [timothy.taylor@state.co.us]; Susan Schow [schow29@comcast.net]  
**CC:** Beeler, Cindy [Beeler.Cindy@epa.gov]; James Jarrett [james.f.jarrett@wv.gov]; Dorman, Lisa [ldorman@pa.gov]  
**Subject:** RE: FW: Methane Team: Punch List and Edits for External Review  
**Attachments:** METHANE\_Prelim\_External\_Draft\_ITRC\_1\_15\_18-JFJ\_TT edits accepted.docx

I was fine with the edits but I did add a line for additional storage monitoring under the CARB reg since it is different than our LDAR requirements. Also, we are now "CARB" vs. "ARB" so I fixed that where I saw it.

**From:** Taylor - CDPHE, Timothy [mailto:timothy.taylor@state.co.us]  
**Sent:** Thursday, January 18, 2018 8:58 AM  
**To:** Susan Schow <schow29@comcast.net>  
**Cc:** Beeler, Cindy <Beeler.Cindy@epa.gov>; Scheehle, Elizabeth@ARB <Elizabeth.Scheehle@arb.ca.gov>; Jarrett, James F <James.F.Jarrett@wv.gov>; Dorman, Lisa <ldorman@pa.gov>  
**Subject:** Re: FW: Methane Team: Punch List and Edits for External Review

Thanks Susan. I've attached the cleaned-up version of the Regs section for comparison, which has a few minor changes than the document you just sent around.

Tim

On Thu, Jan 18, 2018 at 9:54 AM, Susan Schow <[schow29@comcast.net](mailto:schow29@comcast.net)> wrote:

Cindy and Elizabeth,

Just wanted to share with you these last edits (starting on page 12) to the Regulations section by James Jarrett (see attached). We are really trying to keep this review about previous edits (confirming all correct) but he had some good new revisions to the intro text and just wanted to get your buy-in before finalizing.

Can you expedite any responses?

I need to lock-down changes and finalize asap to work on references.

Thanks,

Susan

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**From:** Jarrett, James F [mailto:[James.F.Jarrett@wv.gov](mailto:James.F.Jarrett@wv.gov)]  
**Sent:** Thursday, January 18, 2018 10:41 AM  
**To:** Susan Schow <[schow29@comcast.net](mailto:schow29@comcast.net)>; 'Taylor - CDPHE, Timothy' <[timothy.taylor@state.co.us](mailto:timothy.taylor@state.co.us)>

**Cc:** 'Dorman, Lisa' <ldorman@pa.gov>

**Subject:** RE: Methane Team: Punch List and Edits for External Review

Sure. Here are 2 links about AMOC-6 for use of an infrared camera in place of a analyzer for difficult-to-monitor LDAR components. Attached is additional information if needed.

<https://webmail.tceq.texas.gov/gw/webpub/7c129ba5f85e97c24ceb511d636bc88caddb0cc/GWDOC/DREF/tnrdom3.dms3apo.ansrp01/556427/Official/HTML/GWContentRoot?action=Document.View&merge=fileview&bNoRefresh=1&Item.Attachment.filename=TRV+%2d+9423%2c+N202+EQUISTAR+CHEMICALS+LP+%5bAMENDMENT+NONATTAINMENT+212204%2c+212476%5d&User.context=7c129ba5f85e97c24ceb511d636bc88caddb0cc&Item.Attachment.type=Document&Item.Attachment.Library.id=tnrdom3.dms3apo.ansrp01&Item.Attachment.Document.id=556427&Item.Attachment.Document.version=Official&Item.Attachment.allowViewNative=1>

<https://webmail.tceq.texas.gov/gw/webpub/d3a3e26963f150a898f1fc89879ac44edca93/GWDOC/DREF/tnrdom3.dms3apo.aopdp95a-new/77006/Official/HTML/GWContentRoot?action=Document.View&merge=fileview&bNoRefresh=1&Item.Attachment.filename=Tech+Summ+%2d+O1419+Equistar+Chemicals%2c+LP+%5bAdmin%2c+23892%5d&User.context=d3a3e26963f150a898f1fc89879ac44edca93&Item.Attachment.type=Document&Item.Attachment.Library.id=tnrdom3.dms3apo.aopdp95a-new&Item.Attachment.Document.id=77006&Item.Attachment.Document.version=Official&Item.Attachment.allowViewNative=1>

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**From:** Susan Schow [mailto:schow29@comcast.net]

**Sent:** Thursday, January 18, 2018 9:35 AM

**To:** 'Taylor - CDPHE, Timothy' <timothya.taylor@state.co.us>; Jarrett, James F <James.F.Jarrett@wv.gov>

**Cc:** 'Dorman, Lisa' <ldorman@pa.gov>

**Subject:** RE: Methane Team: Punch List and Edits for External Review

Thanks James and Tim,

Do I need to share with Cindy Beeler (and/or Elizabeth) to get feedback since they wrote much of this.

If James can provide the citation to the AMOC #6 on pg 20 as Tim noted, I will be happy to forward to Cindy.

BTW -- the ITRC style guide requires Table numbering consecutively from the front of the document so will be correct at time of submission (Table 2 is 2<sup>nd</sup> table in document now). Also, don't worry about formatting since Table headers will be put in last thing because pages continue to move.

Thanks!

Susan

Susan Schow, MPH

ITRC Methane Team - Program Advisor

[Schow29@comcast.net](mailto:Schow29@comcast.net)

207-841-0534

**From:** Taylor - CDPHE, Timothy [<mailto:timothy.taylor@state.co.us>]  
**Sent:** Wednesday, January 17, 2018 4:12 PM  
**To:** Jarrett, James F <[James.F.Jarrett@wv.gov](mailto:James.F.Jarrett@wv.gov)>  
**Cc:** Susan Schow <[schow29@comcast.net](mailto:schow29@comcast.net)>; Dorman, Lisa <[ldorman@pa.gov](mailto:ldorman@pa.gov)>  
**Subject:** Re: Methane Team: Punch List and Edits for External Review

Thanks James. I made some modifications to the language you added on page 19 (see attached). I tried to organize it in a way that flowed with the entire paragraph.

Can you please provide a reference for Texas' AMOC-6? I was unable to locate one online.

Tim

On Wed, Jan 17, 2018 at 7:14 AM, Jarrett, James F <[James.F.Jarrett@wv.gov](mailto:James.F.Jarrett@wv.gov)> wrote:

Sorry I attached the old version.

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**From:** Jarrett, James F  
**Sent:** Wednesday, January 17, 2018 8:59 AM  
**To:** 'Taylor - CDPHE, Timothy' <[timothya.taylor@state.co.us](mailto:timothya.taylor@state.co.us)>  
**Cc:** Susan Schow <[schow29@comcast.net](mailto:schow29@comcast.net)>; Dorman, Lisa <[ldorman@pa.gov](mailto:ldorman@pa.gov)>  
**Subject:** RE: Methane Team: Punch List and Edits for External Review

Thanks. I added some things to Page 19 to clarify OGI monitoring protocol. See attached.

**From:** Taylor - CDPHE, Timothy [<mailto:timothya.taylor@state.co.us>]  
**Sent:** Tuesday, January 16, 2018 7:08 PM  
**To:** Jarrett, James F <[James.F.Jarrett@wv.gov](mailto:James.F.Jarrett@wv.gov)>  
**Cc:** Susan Schow <[schow29@comcast.net](mailto:schow29@comcast.net)>; Dorman, Lisa <[ldorman@pa.gov](mailto:ldorman@pa.gov)>  
**Subject:** Re: Methane Team: Punch List and Edits for External Review

James,

The punch list items are the priority but the intention is to review the entire document for any errors or inconsistencies so we appreciate you doing that for the Regulations section.

I made one edit based on your comment on page 18 that hopefully addresses your point (see attached document and let me know what you think) and agree with all your other comments and proposed edits.

However, can you please clarify your comment on page 19? In essence, is there an OGI monitoring protocol from EPA? If so, we'll want to clarify that sentence to reflect that. Would you mind taking a stab at updating that sentence if need be? Thanks.

Tim

On Tue, Jan 16, 2018 at 9:48 AM, Jarrett, James F <[James.F.Jarrett@wv.gov](mailto:James.F.Jarrett@wv.gov)> wrote:

I know you are looking for the punch list items, but I noticed a few things in the regulation section. My suggested revisions are attached for consideration in red text.

For example:

-NSPS OOOOa covers Gas Processing Plants so I checked it in the tables.

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**From:** Susan Schow [mailto:[schow29@comcast.net](mailto:schow29@comcast.net)]

**Sent:** Monday, January 15, 2018 4:11 PM

**To:** [ryou.minegishi@konicaminolta.com](mailto:ryou.minegishi@konicaminolta.com); [vivien.lecoustre@hq.doe.gov](mailto:vivien.lecoustre@hq.doe.gov); [sidhuffman@cox.net](mailto:sidhuffman@cox.net); [cesar.alfaro@bsee.gov](mailto:cesar.alfaro@bsee.gov); [y.ariel@bluefield.co](mailto:y.ariel@bluefield.co); [j.atkinson@bluefield.co](mailto:j.atkinson@bluefield.co); [dbacon@utah.gov](mailto:dbacon@utah.gov); [barbery.andrea@epa.gov](mailto:barbery.andrea@epa.gov); [beeler.cindy@epa.gov](mailto:beeler.cindy@epa.gov); [nabhath@pa.gov](mailto:nabhath@pa.gov); [jbinder@burnsmcd.com](mailto:jbinder@burnsmcd.com); [dburge@environcorp.com](mailto:dburge@environcorp.com); [anna.h.butler@usace.army.mil](mailto:anna.h.butler@usace.army.mil); [Lindsay.Campbell@aer.ca](mailto:Lindsay.Campbell@aer.ca); [ncezar@ndce.ca](mailto:ncezar@ndce.ca); [chattopadhyay.sandip@epa.gov](mailto:chattopadhyay.sandip@epa.gov); [lance.e.christensen@jpl.nasa.gov](mailto:lance.e.christensen@jpl.nasa.gov); [achristensen@burnsmcd.com](mailto:achristensen@burnsmcd.com); [cclavin@ida.org](mailto:cclavin@ida.org); [jcollins3@mt.gov](mailto:jcollins3@mt.gov); [cramer@adeq.state.ar.us](mailto:cramer@adeq.state.ar.us); [bdeering@gesonline.com](mailto:bdeering@gesonline.com); [steve@kairosaerospace.com](mailto:steve@kairosaerospace.com); [deweese.jason@epa.gov](mailto:deweese.jason@epa.gov); [ldorman@pa.gov](mailto:ldorman@pa.gov); [don.dsouza@gov.bc.ca](mailto:don.dsouza@gov.bc.ca); [roopa.ganapathy@canada.ca](mailto:roopa.ganapathy@canada.ca); [ag5@azdeq.gov](mailto:ag5@azdeq.gov); [nathaniel.gorence@hq.doe.gov](mailto:nathaniel.gorence@hq.doe.gov); [matt.harrison@aecom.com](mailto:matt.harrison@aecom.com); [jhegland@methanealliance.ca](mailto:jhegland@methanealliance.ca); [jorn.herner@arb.ca.gov](mailto:jorn.herner@arb.ca.gov); [kaylie.holland@alaska.gov](mailto:kaylie.holland@alaska.gov); [geojimj@gmail.com](mailto:geojimj@gmail.com); Jarrett, James F <[James.F.Jarrett@wv.gov](mailto:James.F.Jarrett@wv.gov)>; [yaomin.jin@gov.bc.ca](mailto:yaomin.jin@gov.bc.ca); [kelly.kaletsky@epa.ohio.gov](mailto:kelly.kaletsky@epa.ohio.gov); [hisanori.kawashima@konicaminolta.com](mailto:hisanori.kawashima@konicaminolta.com); [mkhan@desu.edu](mailto:mkhan@desu.edu); [christopher.konek@hq.doe.gov](mailto:christopher.konek@hq.doe.gov); [kitty.kong@chevron.com](mailto:kitty.kong@chevron.com); [kopero@battelle.org](mailto:kopero@battelle.org); [placey@aga.org](mailto:placey@aga.org); [TRAVIS.B.LEWIS@NAVY.MIL](mailto:TRAVIS.B.LEWIS@NAVY.MIL); [edward.long1@navy.mil](mailto:edward.long1@navy.mil); [dlyon@edf.org](mailto:dlyon@edf.org); [angela.marconi@state.de.us](mailto:angela.marconi@state.de.us); [smarlb3@gmail.com](mailto:smarlb3@gmail.com); [amckittr@ida.org](mailto:amckittr@ida.org); [adam.miller@nd.gov](mailto:adam.miller@nd.gov); [ryou.minegishi@konicaminolta.com](mailto:ryou.minegishi@konicaminolta.com); [Irene.Montero@bp.com](mailto:Irene.Montero@bp.com); [mmurphy262@comcast.net](mailto:mmurphy262@comcast.net); [anowlan@edf.org](mailto:anowlan@edf.org); [craig.oneill@flir.com](mailto:craig.oneill@flir.com); [ona.papageorgiou@dec.ny.gov](mailto:ona.papageorgiou@dec.ny.gov); [mpatil@langan.com](mailto:mpatil@langan.com); [sreinis@langan.com](mailto:sreinis@langan.com); [sdrichardson@gsi-net.com](mailto:sdrichardson@gsi-net.com); [j.rutherford@heathus.com](mailto:j.rutherford@heathus.com); [escheehl@arb.ca.gov](mailto:escheehl@arb.ca.gov); [schow29@comcast.net](mailto:schow29@comcast.net); [sanjay.shah@dep.nj.gov](mailto:sanjay.shah@dep.nj.gov); [bashman@earthlink.net](mailto:bashman@earthlink.net); [nsihota@chevron.com](mailto:nsihota@chevron.com); [kevin.speicher@dps.ny.gov](mailto:kevin.speicher@dps.ny.gov); [dsPICUZZA@woodardcurran.com](mailto:dsPICUZZA@woodardcurran.com); [petestrauss1@comcast.net](mailto:petestrauss1@comcast.net); [skstuver@gsi-net.com](mailto:skstuver@gsi-net.com); [rsur86@gmail.com](mailto:rsur86@gmail.com); [timothy.taylor@state.co.us](mailto:timothy.taylor@state.co.us); [ouppal@langan.com](mailto:ouppal@langan.com); [laura@kairosaerospace.com](mailto:laura@kairosaerospace.com); [zhongmaosheng@126.com](mailto:zhongmaosheng@126.com)

**Subject:** Methane Team: Punch List and Edits for External Review

Methane Team Members,

I have updated the draft Methane document with the most current text (including David's last draft and the ITRC promised edits including populating Table 5). I have posted for your use.

We are conducting calls this week to finalize the text (addressing final comments) and I am also trying to incorporate all the great figures and graphics you have been submitting for our use since our Team call – THANKS!

It is important to coordinate changes so we don't have multiple versions being editing simultaneously.

If you insert any edits directly within the document, please post the revised version of the document with the new date and your initials and/or send directly to me for posting asap.

We are only fixing items as noted in the punch list (see previous emails) or reviewing the document to ensure previous comments/edits have been incorporated.

**All comments, edits, and source citation information submitted to Susan no later than COB Monday, January 22<sup>nd</sup>.**

See the document at our Team webpage:

<https://www.itrcweb.org/Team/Private?teamID=77>

under:

Evaluation of Innovative Methane Detection Technologies > Document Drafts

It is called "*METHANE\_Prelim\_External\_Draft\_ITRC\_1\_15\_18.docx*"

Under our SharePoint website folder:

<https://itrcweb.sharepoint.com/Methane/Forms/AllItems.aspx>

It is also posted here at this link on SharePoint:

[https://itrcweb.sharepoint.com/\\_layouts/15/guestaccess.aspx?docid=1791bcfc3c7c74d7fae4fa6c02e0eb653&authkey=AesJkQ9Ak46xHV\\_syium8-8&e=qm8Ll7](https://itrcweb.sharepoint.com/_layouts/15/guestaccess.aspx?docid=1791bcfc3c7c74d7fae4fa6c02e0eb653&authkey=AesJkQ9Ak46xHV_syium8-8&e=qm8Ll7)

I will keep you posted on our progress.

Thank you,

Susan

Susan Schow, MPH

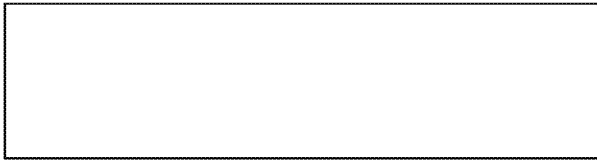
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Timothy Taylor  
IR Camera Inspection Program Work Lead  
Oil & Gas Team

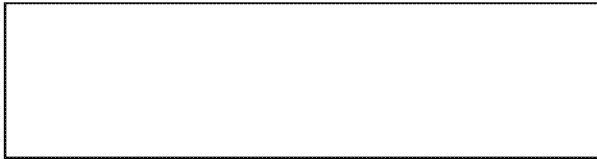


4300 Cherry Creek Drive South, Denver, CO 80246-1530  
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Are you curious about ground-level ozone in Colorado? Visit our [ozone webpage](#) to learn more.

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Timothy Taylor  
IR Camera Inspection Program Work Lead  
Oil & Gas Team

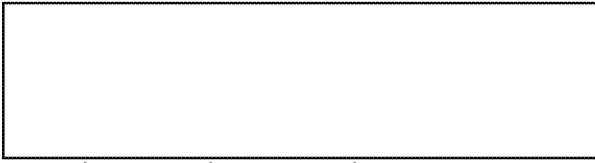


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email: timothya.taylor@state.co.us | www.colorado.gov/cdphe/apcd

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Timothy Taylor  
IR Camera Inspection Program Work Lead  
Oil & Gas Team



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